

REMARKS

The paper is in response to the Final Office Action mailed January 07, 2010 ("the Office Action"). The foregoing amendment cancels claim 40, amends claims 1, 23, and 28 and adds new claim 41. Claims 1-39 and 41 are now pending in view of the amendments. Applicants respectfully request reconsideration of the application in view of the above amendments to the claims and the following remarks. For Examiner's convenience and reference, Applicants present remarks in the order that the Office Action raises the corresponding issues.

In connection with the prosecution of this case and any related cases, Applicants have, and/or may, discuss various aspects of the disclosure of the cited references as those references are then understood by the Applicants. Because such discussion could reflect an incomplete or incorrect understanding of one or more of the references, the position of the Applicants with respect to a reference is not necessarily fixed or irrevocable. Applicants thus hereby reserve the right, both during and after prosecution of this case, to modify the views expressed with regard to any reference.

Please note that Applicants do not intend the following remarks to be an exhaustive enumeration of the distinctions between any cited references and the claims. Rather, Applicants present the distinctions below solely by way of example to illustrate some of the differences between the claims and the cited references. Finally, Applicants request that Examiner carefully review any references discussed below to ensure that Applicants' understanding and discussion of any reference is consistent with Examiner's understanding.

Unless otherwise explicitly stated, the term "Applicants" is used herein generically and may refer to a single inventor, a set of inventors, an appropriate assignee, or any other entity or person with authority to prosecute this application.

Rejection under 35 U.S.C §103(a)

The Office action rejects claims 1-5, 8-10, 12, 13, 23-26, and 28-30 under 35 U.S.C §103(a) over *Creedon et al.* (U.S. Patent No. 6,385,669) in view of *Miesterfeld* (U.S. Patent No. 4,706,082) and rejects claims 6, 7, 11, 14-22, and 31-40 under 35 U.S.C §103(a) over *Creedon* and *Miesterfeld* in view of what is purportedly "well known in the art." Applicants respectfully traverse the rejection.

According to the applicable statute, a claimed invention is unpatentable for obviousness if the differences between it and the prior art "are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art." 35 U.S.C. § 103(a) (2005); *Graham v. John Deere Co.*, 383 U.S. 1, 14 (1966); MPEP 2142. Obviousness is a legal question based on underlying factual determinations including: (1) the scope and content of the prior art, including what that prior art teaches explicitly and inherently; (2) the level of ordinary skill in the prior art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of nonobviousness. *Graham*, 383 U.S. at 17-18; *In re Dembiczak*, 175 F.3d 994, 998 (Fed. Cir. 1999).

"The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious." MPEP 2142 (2007). Analysis supporting a rejection under 35 U.S.C. §103(a) should be made explicit. *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, (2007). Moreover, the Patent Office must identify a reason (such as motivation) why a person of ordinary skill in the art at the time of the invention would have combined the prior art elements in the manner claimed. *Id.* "[R]jections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *Id.* quoting *In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006); *see also* MPEP 2142. A court should be wary of reasoning based on hindsight. *See Graham*, 383 U.S. at 36.

It is the initial burden of the PTO to demonstrate a *prima facie* case of obviousness. If the PTO does not set forth a *prima facie* case of obviousness, the applicant is under no obligation to submit evidence of nonobviousness. MPEP 2142 (emphasis added).

Title 35 requires the analysis to examine "the subject matter as a whole" to ascertain if it "would have been obvious at the time the invention was made." 35 U.S.C. § 103(a) (emphasis

added). Cases such as *Adams* (1966) demonstrated that "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art."

Applicants do not necessarily agree with Examiner's statements regarding at least (1) whether the cited reference(s) disclose each and every element recited in the claim, (2) whether the cited reference(s) teach the combination presented in the claim, (3) whether the cited reference(s) disclose or inherently include the features that the Office Action asserts that the reference(s) include and (4) whether the reference(s) or any other source provides a reason to combine the teachings of the reference(s). Nevertheless, in the interests of expediting prosecution, Applicants herein substantially amend claims 1, 23, and 28 to recite, for example, "interspersing a bit at a guaranteed minimum frequency among data transmitted on the data wire, wherein the interspersed bit is of a polarity opposite that of the detected predetermined number of consecutive bits of the data frame, the predetermined number of consecutive bits being a length of the frame preamble, wherein the minimum frequency is related to the length of the frame preamble such that the interspersed bit is interspersed among the data transmitted on the data wire at least as frequently as the bit length of the frame preamble, the interspersed bit allowing the frame preamble to be shorter than a standard 32-bit management data input/output (MDIO) frame preamble while still enabling synchronization between the master component and the one or more slave components." Support for such amendments is found at least in Figures 32 and 3 and paragraphs 17, 35, 43, 79, and 80 of the originally filed specification.

In contrast, the cited art does not teach or suggest the newly added limitations. For example, *Creedon* at best discusses a 32-bit MDIO preamble and system. However, *Creedon* does not teach or suggest the interspersed bit as now recited in the claims. Likewise, *Miesterfeld* does not teach or suggest the interspersed bit as now recited in the claims.

The Office Action acknowledged that the cited art did not teach interspersing a bit as recited in former claim 40. Applicants note that while the newly added elements have some similarities to former claim 40, the newly added elements add additional elements not found in former claim 40.

Further, while rejecting former claim 40, the Office Action merely stated that interspersing a bit was well known in the art as zero-bit insertion or bit stuffing, which is used to prevent data from being interpreted as control information. In connection with the foregoing, Applicant notes that it appears that the Examiner is relying on personal knowledge as a basis for claiming that bit insertion or bit stuffing is well known. That is, the Examiner has not provided any references or other evidence to prove that bit insertion or bit stuffing is well known. Accordingly, and pursuant to 37 C.F.R. 1.104(d)(2), Applicant hereby respectfully requests an Examiner affidavit that: (i) specifically identifies any and all reference(s), other than those that have been specifically cited by the Examiner, upon which the obviousness rejection of the claims is based; and (ii) provides complete details as to the reasoning and analysis of the Examiner concerning those references as those references are purported to apply to the rejection of the claims. This request applies to any and all claims rejected either in whole or in part based on Official Notice and/or upon assertions by the Examiner to the effect that claimed subject matter is "well known." Finally, please note that this request for an affidavit pursuant to 37 C.F.R. 1.104(d)(2) remains in force throughout the prosecution of this case unless expressly withdrawn by the Applicant.

The amendments presented herein, taken as a whole, render the rejections moot. Applicants note that portions of the claims other than those specifically amended and/or mentioned above may contribute to patentability. In light of the references as now understood by Applicants and the amendments made herein, claims 1-39 and 41 appear to be allowable. Applicants therefore respectfully request that Examiner withdraw the rejection of claims 1-39 and 41 under 35 U.S.C. §103(a).

New Claim

Applicants have added new claim 41. Applicants note that this claim is supported by paragraph 41. This claim depends from claim 1 and is dependable for the same reasons that claim 1 is allowable.

Charge Authorization

The Commissioner is hereby authorized to charge payment of any of the following fees that may be applicable to this communication, or credit any overpayment, to Deposit Account No. 23-3178: (1) any filing fees required under 37 CFR § 1.16; (2) any patent application and reexamination processing fees under 37 CFR § 1.17; and/or (3) any post issuance fees under 37 CFR § 1.20. In addition, if any additional extension of time is required, which has not otherwise been requested, please consider this a petition therefor and charge any additional fees that may be required to Deposit Account No. 23-3178.

CONCLUSION

In view of the foregoing, Applicants submit that the pending claims are allowable and that every issue raised by the Examiner has been addressed. In the event that Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview or overcome by an Examiner's Amendment, Examiner is requested to contact the undersigned attorney.

Dated this 19th day of March, 2010.

Respectfully submitted,

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